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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/432,338	11/02/1999	KLAUS ZIMMERMANN	10191/1157	9914

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EXAMINER

KEASEL, ERIC S

ART UNIT	PAPER NUMBER
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3754

DATE MAILED: 03/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/432,338

Applicant(s)

ZIMMERMANN ET AL.

Examiner

Eric Keasel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 November 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3 October 2001 has been entered.

### ***Specification***

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "a control arrangement" has not been defined in the specification.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The second step of claim 1 (“determining a switching instant...”) has not been described in the specification in any detail. The only explanations of this step are on page 4 with nonenabling phrases such as “This break is usually detected by current analysis” on line 12 and “the time curve of the current is analyzed to determine the switching time” on lines 24 and 25. The disclosure is simply inadequate for such an essential step (one of only two steps in claim 1). It appears that one of the major purposes for this invention is to provide a sufficient time window between  $t_3$  and  $t_4$  such that the switching instant can be identified. It is absolutely critical to the invention to know what this current analysis is and how long it takes in order to determine the sufficiency of the time window.

The “control arrangement” of claim 7 is also not enabling. What is the control arrangement? Claiming an apparatus that has not been described in the specification is non-enabling.

5. Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There was no “control arrangement” disclosed in the application as filed. This is a new matter rejection.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The second step of claim 1 (“determining a switching instant...”) has not been described in the specification in any detail. The only explanations of this step are on page 4 with nonenabling phrases such as “This break is usually detected by current analysis” on line 12 and “the time curve of the current is analyzed to determine the switching time” on lines 24 and 25. The disclosure is simply inadequate for such an essential step (one of only two steps in claim 1). It is vague and indefinite as to what is meant by claim 1, lines 6 and 7.

The construction of the method claims renders them indefinite. It appears that claims 2-4 (all solely dependent on claim 1) describe the iterative process of Fig. 3. However, this is no iteration of these steps as the claims are written.

Claim 5 has been amended to have a structural limitation. However, the preamble states that it should be a method claim. Claim 1 is a method claim and claim 5 has a method step recited in lines 4 and 5. What is meant by lines 2 and 3?

What is the control arrangement of claim 7? Claim 7 appears to be missing words in lines 4-7.

8. In light of the above informalities, the claims have been examined as could best be understood by the examiner. The examiner's failure to apply prior art to any of the claims should not be construed as an indication of allowable subject matter.

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***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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11. Claims 1-7 (as understood) are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lutz et al. (US Patent Number 6,017,017).

Despite the indefinite and non-enabling nature of the claims, it would appear that Lutz et al. anticipate the claims since the claims appear to be overly broad. For example, the first step in claim 1 “determining a duration of a time window such that a current flowing through the consumer during the time window does not exceed a threshold value” can be read as a threshold value being the limit of your power supply. Determining a duration such that the current does not exceed the threshold value could simply mean you don’t exhaust your power supply. During the large time window established by the first step, the second step is merely a position sensor. So, in one of many possible broad reading of the claims, any solenoid with a position sensor reads on the claims. Similarly, it would appear that Lutz et al. anticipate the other claims.

12. Claims 1-7 (as understood) are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Li (US Patent Number 5,942,892).

Despite the indefinite and non-enabling nature of the claims, it would appear that Li anticipates the claims since the claims appear to be overly broad. For example, the first step in claim 1 “determining a duration of a time window such that a current flowing through the consumer during the time window does not exceed a threshold value” can be read as a threshold value being the limit of your power supply. Determining a duration such that the current does not exceed the threshold value could simply mean you don’t exhaust your power supply. During the large time window established by the first step, the second step is merely a position sensor.

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So, in one of many possible broad reading of the claims, any solenoid with a position sensor reads on the claims. Similarly, it would appear that Li anticipates the other claims.

13. Claims 1-7 (as understood) are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Smith, Jr. et al. (US Patent Number 5,738,071).

Despite the indefinite and non-enabling nature of the claims, it would appear that Smith, Jr. et al. anticipate the claims since the claims appear to be overly broad. For example, the first step in claim 1 “determining a duration of a time window such that a current flowing through the consumer during the time window does not exceed a threshold value” can be read as a threshold value being the limit of your power supply. Determining a duration such that the current does not exceed the threshold value could simply mean you don’t exhaust your power supply. During the large time window established by the first step, the second step is merely a position sensor. So, in one of many possible broad reading of the claims, any solenoid with a position sensor reads on the claims. Similarly, it would appear that Smith, Jr. et al. anticipate the other claims.

14. Claims 1-7 (as understood) are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Moyers et al. (US Patent Number 5,583,434).

Despite the indefinite and non-enabling nature of the claims, it would appear that Moyers et al. anticipate the claims since the claims appear to be overly broad. For example, the first step in claim 1 “determining a duration of a time window such that a current flowing through the consumer during the time window does not exceed a threshold value” can be read as a threshold value being the limit of your power supply. Determining a duration such that the current does



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not exceed the threshold value could simply mean you don't exhaust your power supply. During the large time window established by the first step, the second step is merely a position sensor. So, in one of many possible broad reading of the claims, any solenoid with a position sensor reads on the claims. Similarly, it would appear that Moyers al. anticipate the other claims.

15. Claims 1-7 (as understood) are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Corso et al. (US Patent Number 5,320,123).

Despite the indefinite and non-enabling nature of the claims, it would appear that Corso et al. anticipate the claims since the claims appear to be overly broad. For example, the first step in claim 1 "determining a duration of a time window such that a current flowing through the consumer during the time window does not exceed a threshold value" can be read as a threshold value being the limit of your power supply. Determining a duration such that the current does not exceed the threshold value could simply mean you don't exhaust your power supply. During the large time window established by the first step, the second step is merely a position sensor. So, in one of many possible broad reading of the claims, any solenoid with a position sensor reads on the claims. Similarly, it would appear that Corso et al. anticipate the other claims.

16. Claims 1-7 (as understood) are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Zimmermann (US Patent Number 5,257,014).

Despite the indefinite and non-enabling nature of the claims, it would appear that Zimmermann anticipates the claims since the claims appear to be overly broad. For example, the first step in claim 1 "determining a duration of a time window such that a current flowing

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through the consumer during the time window does not exceed a threshold value” can be read as a threshold value being the limit of your power supply. Determining a duration such that the current does not exceed the threshold value could simply mean you don’t exhaust your power supply. During the large time window established by the first step, the second step is merely a position sensor. So, in one of many possible broad reading of the claims, any solenoid with a position sensor reads on the claims. Similarly, it would appear that Zimmermann anticipates the other claims.

17. Claims 1-7 (as understood) are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tauscher (US Patent Number 5,109,885).

Despite the indefinite and non-enabling nature of the claims, it would appear that Tauscher anticipates the claims since the claims appear to be overly broad. For example, the first step in claim 1 “determining a duration of a time window such that a current flowing through the consumer during the time window does not exceed a threshold value” can be read as a threshold value being the limit of your power supply. Determining a duration such that the current does not exceed the threshold value could simply mean you don’t exhaust your power supply. During the large time window established by the first step, the second step is merely a position sensor. So, in one of many possible broad reading of the claims, any solenoid with a position sensor reads on the claims. Similarly, it would appear that Tauscher anticipates the other claims.

#### ***Response to Arguments***

18. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

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***Conclusion***

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Keasel whose telephone number is (703) 308-6260. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry C. Yuen can be reached on (703) 308-1946. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3588 for regular communications and (703) 305-3588 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

EK14MAR02

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March 14, 2002



**WILLIAM DOERRLER  
PATENT EXAMINER  
GROUP 3400**